

II. *Notes on some Butterflies taken in Jamaica.* By G. B. LONGSTAFF, M.D., F.R.C.P., F.E.S.

[Read November 6, 1907.]

THE island of Jamaica is 144 miles long by 49 miles wide, and comprises an area of 4207 square miles, so that it is about equal to the counties of Devon and Somerset taken together. It lies well within the tropics, being between the latitudes $17^{\circ} 45'$ and $18^{\circ} 35' N$.

Rather more than half the total area of the island is below the 1000 feet contour line, but some 60 square miles have an altitude of 4000 feet and upwards, the highest point reached by the Blue Mountains being 7360 feet.

My most remote points were separated by 120 miles of longitude, and 40 miles of latitude, but though I spent three weeks at an elevation of 2000 feet and upwards my highest point was but 2900 feet.

As regards geological formations, I collected upon almost all those of which the island is made up, with one important exception—I did not explore the Blue Mountains, indeed there seemed to be little to induce one to do so at that time of the year.

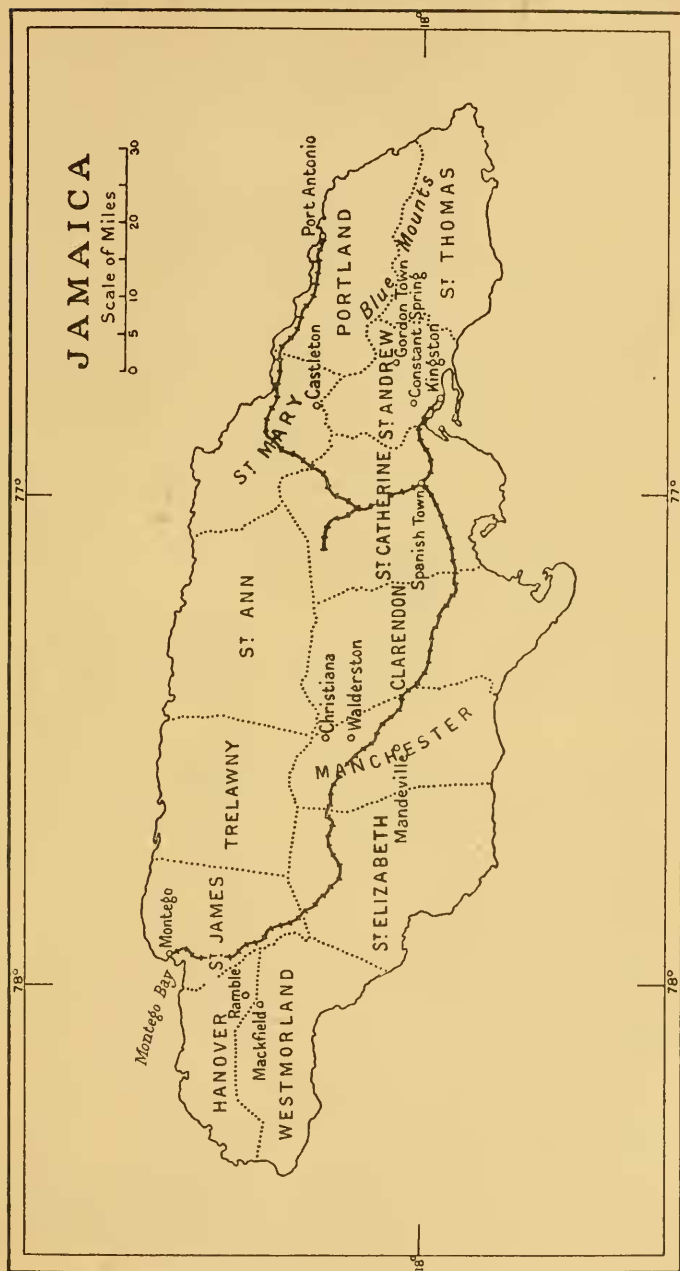
My remarks naturally enough apply to the places that I have visited, and to the times of my visits, limitations which should not be forgotten. My collecting was confined to ten weeks (Dec. 31—March 8) of the dry season, the tropical winter. However, the general aspect of the country towards the end of the dry season does not suggest to the English visitor either winter or early spring, but rather a fine, hot, late autumn, with burnt-up, gone-to-seed herbage and falling leaves. The quiet and solitude of the woods was surprising, so that the falling of a big leaf, such as are common in the tropics, would make clatter enough upon the path to give one a start. Often where trees and varied undergrowth little disturbed by cultivation suggested a profusion of insects, almost none were found. Not only were butterflies scarce, but beetles, bees, wasps, and especially flies. There is a note in my diary for Febr. 16th: "Christiana. Caught a wasp, the first I had seen since Constant Spring" (Jan. 14). During

that month I took but about half-a-dozen flies. Mr. H. P. Gosse, in his altogether admirable "Naturalist's Sojourn in Jamaica," expresses his surprise at the scarcity of insects, in words that seem to merit quotation. "I had left England with high expectations of the richness of the West Indian entomology: large and gaily-coloured beetles, I supposed, would be crawling on almost every shrub, gorgeous butterflies be filling the air, moths be swarming about the forest-edges at night, and caterpillars be beaten from every bush. These expectations were far from being realised: . . . in general butterflies are to be obtained only casually. Moths are still more rare . . . in general beetles and the other orders are extremely scarce, and especially Diptera; I have often been astonished at the paucity of these, as compared with their abundance in Canada and the Southern United States. . . . One may often walk a mile,—I do not mean in the depth of the forest, but in situations comparatively open, beneath an unclouded sun,—and not see more than a dozen *specimens* of all orders" (pp. 94, 95).

I was told that something between sixty and seventy species of butterflies occur in Jamaica, and it is a surprising fact that such a large tropical island should not produce more species than Great Britain. During my ten weeks' collecting I obtained forty-seven species, as compared with thirty-six species that are to be found in the one Devonshire parish of Mortehoe. Indeed for the most part I found Jamaica poorer in butterflies than Mortehoe in the summer. There were but two occasions on which the numbers were comparable, both near Port Antonio.

On the afternoon of February 25th I was ferried over to Navy Island. The Trade-wind was blowing rather strongly, and the only sheltered spot was some swampy ground to the leeward of a bluff; here *Anartia jatrophæ*, Linn., was in the greatest profusion, many being busy about the flowers of the Logwood-trees (*Hæmatoxylon campechianum*, Linn.), with them were a few *Dione vanillæ*, Linn., and one *Precis lavinia*, Cram.

The other time was on March 3rd, near the top of "Shotover," to the west of Port Antonio. Here, about 1000 feet above sea-level, on a spur of a somewhat higher hill, commanding a glorious view of sea and coast, was a steep slope with an aspect a little south of east. An acre or two of this slope, partly sheltered by trees,



displayed a greater wealth of flowers than I saw anywhere else in Jamaica, the dominant and most attractive being a species of Vervain (probably *Stachytarpha jamaicensis*, U.). It was a very hot day, with less wind than usual, and I was there from 11.15 a.m. to 12.30 noon. *Dione vanillæ* was fairly swarming, while *Euptoieta hegesia*, Cram., was scarcely less abundant, and among them were numerous *Preis lavinia*, Cram., and a few Skippers, *Preis nyctelius*, Latr., *P. ares*, Feld., and *Morys valerius*, Mösch. *Callidryas eubule*, Linn., was coursing about in all directions, often stopping to take a sip from the Vervain; but not a single White was seen; *Colanis* was conspicuous by its absence, while *Anartia jatrophæ*, Linn., if present did not obtrude itself on my notice. A hasty glimpse of a *Papilio* was obtained, also of a butterfly that suggested my South African acquaintance, *Planema esebria*, Hew. (? *Actinote* sp.). Among the butterflies were a few of the beautiful Arctiid, *Utetheisa bella*, Linn. (*speciosa*, Walk.). Altogether it was such a sight as seldom gladdens the eye, but which happily lingers long in the memory.

A few words on the localities visited:—

Constant Spring (Dec. 31—Jan. 14); the hotel stands near the northern edge of the Liguanean plain, about 500 feet above the sea. There is good collecting in the woods at the foot of the mountains up to Stoney Hill, say 1000 feet.

Gordon Town (Jan. 9); the bed of the Hope River below the town, which I visited once, is about 800 feet.

Chancery Hall (Jan 8, also March 7), on the plain, is beside the dry bed of a stream, to the west of Constant Spring.

Temple Hall (Jan. 11, 12), c. 850, is on the road to Castleton, Jamaica.

All these places are in St. Andrew Parish. Parishes in Jamaica take somewhat the place of counties in England, and as the names are in constant use it seems well to give them.

Castleton, St. Mary Parish (Jan. 11, 12), is just beyond the height of land; the Botanic Garden is 500 feet above the sea. It proved a disappointing locality.

Mandeville, Manchester Parish (Jan. 16–22), ranges from 2000 feet to about 2200 feet. It proved very poor.

Mackfield and Ramble, close together, the former in Westmoreland, the latter in Hanover (Jan. 24—Feb. 2).

A delightful rolling country of pasture intermixed with woods. About 800–1000 feet. Unfortunately the very head-quarters of the collector's greatest foe in Jamaica—the tick.

Montego Bay, St. James (Feb. 2–5); the collecting ground ranges from the sandy shore to the top of a wooded hill of about 300 feet, and was fairly productive.

Walderston, Manchester (Feb. 6–20); the collecting ground ranged from about 2500 feet to 2900 feet (Mile Gully Mountain). An almost waterless district, but the tops of the hills covered with woods. One day (Feb. 16) was spent at Christiana in a gorge cut through Trappean Conglomerate, about seven miles to north of Walderston. Height about 2000 feet in a well-watered country.

Spanish Town, St. Catherine (Feb. 20–23); near the edge of an extensive plain, its elevation above the sea must be inconsiderable.

Port Antonio, Portland (Feb. 24—March 5); from the coast my collecting ground extended to the summits of "Shotover" on the west and Park Mount on the east, both about 1000 feet.

Speaking generally, insects were commonest near the sea and on the slopes of the hills up to 1000 feet. Flies, bees and wasps were especially scarce at 2000 feet and over.

DANAINÆ.

Anosia archippus, Fabr., 4 ♂. Only seen at Port Antonio. Found about *Asclepias* also at Rose and other flowers; it is hard to kill.

The Jamaican specimens of this butterfly differ from those from South America in the following particulars. They are brighter; they have less black along the veins; there is more fulvous at the tip of the fore-wing; the white spots beyond the cell are outlined (and sometimes suffused) with fulvous.

Tasitia jamaicensis, Bates. 2 ♀ near the stream which the Kingston-Castleton road crosses close by Temple Hall; a ♂ near Ramble Post Office, another ♂ near Walderston. Like the preceding, this is hard to kill.

The form met with on the mainland, *T. eresimus*, Cram., which appears to be distinct, has much more black about it, *e.g.* along the costa and the veins.

Mr. P. W. Jarvis said to me: "Neither of the Milkweed Butterflies is very common in Jamaica."

SATYRINÆ.

Calisto zangis, Fabr. 26 specimens. Very generally distributed in woods, but seldom abundant. Constant Spring, Castleton, Mandeville, Mackfield (common), Walderston (common), Port Antonio (abundant). The sexes about equally divided. It flies amongst herbage so close to the ground as to be difficult to catch, yet seldom moving many yards. It is distinctly a shade-lover. On 27th February, 1907, near Port Antonio, I saw it flying freely on a rainy day.

HELICONINÆ.

Heliconius charithonia, Linn. 21 specimens. Generally distributed throughout the island and not uncommon. Constant Spring, Castleton (common), Mackfield, Walderston, Christiana, Montego Bay, Port Antonio (common).

This butterfly has usually a slow flapping flight often in half-shade. It is distinctly local, in the sense that it is confined to a very small area in each locality; sometimes it may be seen flying up and down a very short beat. It settles on flowers and leaves with wings fully expanded.

Mr. P. W. Jarvis, of the Colonial Bank, told me that the butterfly was very common later in the year, and that it "clustered" on going to rest for the night; a number of specimens sitting close together, but not actually clinging to one another. On 5th March, 1905, at "Shotover," near Port Antonio, close upon 1000 feet above the sea, at about noon on a dull day, eight or ten were seen flying about under the shelter of a hedge. As many as seven of these settled on dead sticks, etc., within a space of 2 feet by 1 foot. This butterfly is somewhat hard to kill.

As compared with Venezuelan specimens, those from Jamaica have all the yellow marks a little larger; and the red spot near the base of the cell of the hind-wing is smaller, or even absent.

NYMPHALINÆ.

Coleris cillene, Cram. (should not the name be *cyllene*?), 12 ♂, 4 ♀. Generally distributed and not uncommon. Constant Spring (common), Castleton (common), Mackfield, Montego Bay, Walderston, Port Antonio.

A grand insect on the wing, sailing about like a piece of rich gold. The imperfect condition of many of the specimens is not apparent during its strong flight. It is

most easily taken at flowers such as *Lantana camara*, Linn., and *Eupatorium odoratum*, Linn. One specimen appears to have been bitten by a lizard.

The male is distinguished from that of the South American *C. delila*, Fabr., by its more orange tint and the comparative absence of black; but *cillene* should perhaps be looked upon as a local race of *delila*.

Dione vanillæ, Linn. 16 ♂, 7 ♀ Generally distributed and in some places very abundant. Constant Spring (common), shore of Port Royal harbour, Mandeville (abundant), Ramble (abundant), Montego Bay, Walderston, Spanish Town, Port Antonio (swarming on "Shotover").

A brilliant insect appearing very red upon the wing and reminding me of an *Acræa*. Although it could fly about wildly enough, several males were seen one afternoon fluttering among dead leaves close to the ground.

I do not detect any difference between Jamaican and South American specimens, save that the former are usually smaller and often brighter.

Euptoicta hegesia, Cram. 12 specimens. Widely distributed but in most places scarce. Constant Spring, Temple Hall, Montego Bay (common near the hotel, also found on the sandy shore), Walderston, Port Antonio (common in a swampy meadow near the shore to the east, but in swarms on the top of "Shotover").

This insect reminded me of *Atella phalanta*, Drury.

Jamaican specimens have the orbicular and reniform stigmata less clearly outlined than those from the Spanish main; moreover the ground-colour is a brighter tawny.

Phyciodes frisia, Poey. 5 specimens. This little butterfly was confined to the Liguanean plain and the hills bounding it on the north, and was not common.

Constant Spring, Stoney Hill, near Gordon Town, Spanish Town.

Precis lavinia, Cram. 8 specimens, all males. Constant Spring, Chancery Hall, Mandeville, Port Antonio. It usually settles on or near the ground, frequenting hot, dry, exposed places. Is wary and not easy to catch.

The nomenclature of this very variable and wide-ranging species (from the Southern United States to the Argentine) has long been in great confusion, but has been cleared up by Mr. Guy A. K. Marshall, who has recently re-arranged the genus in the National Collection. Cramer

named three forms of this genus, all from Surinam, *lavinia*, *evarete* and *genoveva*. It appears to me that Mr. Marshall is quite correct in uniting these under the first name, together with the Northern form *cœnia*, Hübn. (the name adopted by Messrs. Godman and Salvin in the "Biologia Cent. Am.").

Jamaican specimens, usually known by local collectors as *Junonia genoveva*, Cram., are, as a rule, brighter than South American, with the transverse white band near the tip of the fore-wing fairly conspicuous, being of the form *zonalis*, Feld.* They are somewhat intermediate in character, between the South American and North American forms, to which latter specimens in the Hope Collection from the Bahamas approach more nearly.

Anartia jatrophæ, Linn., var. *jamaicensis*, Möschler. 8 ♂, 7 ♀. Widely distributed and abundant. Constant Spring, Castleton, Mandeville, Mackfield, Montego Bay, Walderston (scarce), Christiana, Port Antonio.

It is *par excellence* the common road-side Butterfly of Jamaica. A somewhat ghostly looking insect on the wing; when settled among whitish dead grass, with wings closed, it is very cryptic. It usually settles on the ground or close to it and does not frequent flowers much.

Jamaican specimens are all very readily distinguished from those from South America by the broad bright fulvous, or orange brown, margin to the wings. There is a mere trace of this colour in specimens from the mainland, which moreover appear to be less densely scaled.

Cystineura doreas, Fabr. (*mardania*, Cram.). 22 specimens. Local; Constant Spring, Gordon Town, Mackfield (abundant), Williamsfield Cave, Montego Bay, Port Antonio (common).

This delicate and very distinct butterfly, which somewhat resembles a Satyrid, frequents moist, shady places with long grass. There is sometimes much fluttering in its very slow flight, but at other times it glides. Though not such a flower-lover as many Nymphalines, it often visits the Spanish Needle, *Bidens leucanthus*, W. It usually settles with its wings wide open, and if it close them up re-opens them quickly. On 1st February, 1907,

* H. Fruhstorfer (Stett. Ent. Zeit. 1907, p. 224) comes to the same conclusion as Marshall as to Cramer's three forms, but makes the Cuban form (*zonalis* according to Marshall) a new sub-species *michælisi*.

near Chichester Rectory, Ramble, two were beaten out after sundown; both settled almost at once, one on the top of a grass stem with its wings up, the other towards the top of a long green fern. The second very deliberately set up its wings, then after an interval it retracted its fore-wings so as to conceal the large white patch. I failed to find any naturally at rest.

It may be noted that *C. cana*, Erichs., the representative of *C. dorcas* on the mainland, lacks the conspicuous orange brown of the latter species.

Victorina stelenes, Linn. (So spelled by Linné; Mr. Kirby has it *steneles*; probably Linné meant to call it after either Sthenelus or Sthenele, the other names are meaningless.) 11 specimens. Widely distributed, but not common. Constant Spring, Mackfield, Walderston, Christiana, Spanish Town, Port Antonio. On the banks of the Rio Grande, on 2nd March, I saw four or five flying together about a bush of what I took to be the Rose Apple (*Jambosa vulgaris*, D.C. = *Eugenia jambos*, Linn.).

Cabinet specimens give little idea of the beauty of this butterfly during life, since its lovely green fades rapidly. Bold, like many of its family, it will return again and again to the same perch, often a dark-green leaf at or above the level of the eye. Sitting there with its wings three-quarters open it is a truly beautiful object, yet not nearly so conspicuous as might be thought, and this is true whether its wings be open or closed, whether at rest or in its rather slow flight. One courageous specimen settled first at my feet and then upon my net!

In Jamaican specimens the fulvous spot at the anal angle of the hind-wing is larger and brighter than in South American; there is also somewhat more fulvous on the underside, the bands being broader.

Aganisthos orion, Fabr. (*odius*, Fabr.). 5 specimens. This very fine and robust Butterfly was only met with to the west of Port Antonio near the sea-level.*

It is quite probable that sundry large brown butterflies

* Messrs. Godman and Salvin ("Butterflies of St. Vincent, Grenada, etc.," Proc. Zool. Soc. Lond. (1896), p. 515) say: "Grenada. Two specimens of this common species, which is also found in Hispaniola, but in no other West Indian island that we know of." It is, however, one of the few butterflies named by Gosse ("A Naturalist's Sojourn in Jamaica" (1851), p. 99).

seen at Ramble and Walderston may have belonged to this species or the next.

A strong flier frequenting the tops of trees, especially the Star Apple, *Chrysophyllum cainito*, Linn., on the leaves and fruit of which it occasionally settles. More frequently it is seen to rest on tree-trunks (in particular the Log-wood, *Hæmatoxylon campeachianum*, Linn.), on posts or buildings within a few feet of the ground, always with its head downwards and wings closed over its back. When thus settled it may be detected, when seen in profile, at a considerable distance in spite of its cryptic coloration. It is not easy to catch even when settled, and I spent much time over it. One of my specimens seems to show a bird-bite at the usual corner of the hind-wings.

In the Jamaican specimens the fulvous band across the fore-wing is much broader than in those from the mainland; there is also a tendency for the fulvous on the hind-wing to be more extended.

Cœa acheronta, Fabr. (*cadmus*, Cram.). A broken fore-wing of this species was picked up off the ground in a wood above Constant Spring, January 5th, 1907.

The Haïti specimens in the Hope Collection are more fulvous than those from the mainland, and this fragment appears to be of Haïtian type.

LYCÆNIDÆ.

Leptotes (Tarucus) theonus, Lefebvre, 1856 (*Plebeius cassius*, var. a, *floridensis*, Morrison, 1874), 8 ♂, 19 ♀. Met with in every locality that I visited: common at Mackfield; abundant at Constant Spring, Gordon Town and Port Antonio. The excess of females taken may be attributed to its superior size and attractiveness, but possibly it is easier to capture. It is most often seen flying over shrubs or near woods; it has a quick jerky flight and appears larger than it is, especially the female. After rain it is about the first butterfly to come out.

All my specimens taken in Jamaica are distinguishable at a glance from those taken in South America, Trinidad or Tobago. They are smaller and darker; the hind-wing of the male is violet-blue instead of white; the fore-wing of the female is shot with blue over at least two-thirds of the fore-wing, and there is much less white in the hind-wing. On the underside the metallic-centred ocellus is larger, and there are differences in the dark markings of the fore-wing.

In my opinion it is specifically distinct from *S. cassius*, Cram., but if not distinct it is a very well-marked local race. The earliest description of the form that I can find is that by Lefebvre in Ramon de la Sagra's "Histor. Cuba," VII, p. 611, and it should, I think, bear his name. It appears in W. Holland's "Butterfly Book" as *Lycæna theonus*, Lucas.

Catochrysops hanno, Stoll (? *monops*, Zeller). 11 specimens. Abundant at Constant Spring, also met with at Mackfield, Walderston and Port Antonio. Its small size and insignificant appearance probably often cause it to be passed over. It frequents small Composites by the roadside, especially *Distreptus spicatus*, Cass.

Callipsyche thius, Hübn. A single very fine male near the Jam Factory, at the foot of the hills, Constant Spring. On the wing I took it for a Skipper. This and the specimens from Jamaica in the National Collection lack the white mark at the tip of the fore-wing of the male met with in Venezuelan examples.

Calycopis pan, Drury. Three specimens, taken in the garden at Walderston by my Portuguese servant. The lobes of the hind-wings are everted as in the Indian *Aphnæus* and the South African *Argiolaus*.

PIERINÆ.

Callidryas eubule, Linn. (f. *sennæ*, Linn.). 17 ♂, 14 ♀. Constant Spring (common), Gordon Town (abundant), Castleton, Temple Hall (abundant), Mandeville, Mackfield (common), Montego Bay (common), Walderston, Christiana, Spanish Town (abundant), Port Antonio (abundant).

If not actually the most abundant, at all events the most conspicuous butterfly on the island. Brilliant in colour, bold in flight, and numerous in individuals, it was always much in evidence.

The "dry" form prevailed, more especially as the season advanced.

Kricogonia lyside, Godt., 6 ♂, 2 ♀. Ramble, Montego Bay, Spanish Town, Port Antonio (not uncommon along the coast to the eastward).

Glutophrissa ? drusilla, Cram. Common at Constant Spring, also taken at Montego Bay. This species usually flies high, frequenting flowering trees and so out of reach. My specimens are small, especially the females, which are quite devoid of black markings. Somewhat similar

specimens from Jamaica and other islands were named by Mr. Butler *ilaire*, Godt., but the type of Godart's insect came from Brazil. In the museum at Kingston this bears the name *Appias poeyi*, Butl. It is perhaps the *Mylothris margarita* of Hübner. It would be interesting to see Jamaican specimens taken in the wet season, for the presumption is that mine are of the dry form.

Sphænogona adamsi, Lathy. Of this butterfly, so rare in collections, I was fortunate enough to secure a male and three females. One of the latter was taken near Constant Spring, the other three specimens on the Manchester Mountains, viz. one at Contrivance, about 2700 feet, the other two on Mile Gully Mountain at nearly the same elevation.

The solitary specimen in the National Collection is from "Kingston, Jamaica."

Terias euterpe, Ménét, 39 ♂, 21 ♀. The commonest species of the genus in Jamaica. Constant Spring (abundant), Gordon Town (not common), Castleton, Mandeville, Ramble (abundant), Montego Bay, Walderston (not common), Port Antonio (common).

As this little butterfly flits along close to the ground it appears to be easy to catch; however, it goes faster than one would think; its flight is jerky, and when struck at it almost always goes down into the herbage and so escapes the net again and again. This remark must be held to apply to several species of *Terias*, which were not always distinguished in the field.

A male was taken at Mackfield with a small symmetrical injury to each hind-wing.

Terias westwoodii, Boisd. (The Jamaican form, ? *dina*, Poey.) Three males, two females. Only met with at Montego Bay. It flies more freely and more strongly than the last.

The Jamaican specimens are small and pale: the black on the hind-margin (especially in the female) is limited to the tip of the fore-wing.

Terias messalina, Fabr., 10 ♂, 10 ♀. Constant Spring, Hotel Grounds and wood to N.E., Mackfield (common), Montego Bay, Spanish Town, Port Antonio.

Terias delia, Cram., 16 ♂, 14 ♀. Widely distributed, but not so common as *euterpe*. Constant Spring (common), Castleton, Mandeville, Mackfield, Montego Bay, Walderston, Port Antonio.

A male taken above Constant Spring at about 1000 feet elevation on January 1st; another male taken near Chancery Hall, 500 feet, on January 8th, approached the form *lydia*, Feld., in having the longitudinal black streak broader than usual. On the other hand, another male taken somewhat below the first named and on the same day has *no black streak* at all, merely the streak of orange.

Terias clathea, Cram., 3 ♂, 1 ♀. Scarce. Constant Spring, Montego Bay, Port Antonio (Shotover Hill).

This butterfly appears to be specifically distinct from *delia*, Cram., but is certainly very closely allied to it. The females are difficult to distinguish, and some specimens of the male sex not easy. In two males from Venezuela one has the black streak obsolescent, in the other entirely absent with indeed very little orange.

Pieris phileta, Fabr. (*monuste*, Hübn. et auct. nec Linn.), 4 ♂, 1 ♀. Only met with at Montego Bay, and at Contrivance, Walderston.

The flight of this butterfly is sometimes extremely swift, and it exercised my active Portuguese servant and myself very severely to secure three specimens near the shore of Montego Bay. Sometimes it may be taken at the flowers of *Eupatorium odoratum*, Linn. During life the clubs of the antennæ are of a beautiful turquoise blue.

PAPILIONINÆ.

Papilio polydamas, Linn. (f. *polyerates*, Hopff.). 7 specimens. Constant Spring (common), below Gordon Town, Spanish Town. Not seen on the high land.

Fond of flowers, especially *Bougainvillea*, fluttering as it feeds, as many of the family do. A specimen observed flying in deep shade about 5 p.m. settled on a dead leaf and closed its wings; the underside was distinctly cryptic.

All my specimens are of the insular form in which the marginal spots of the fore-wing are paler, those of the hind-wing greener, than in South American examples: the marginal pattern on the underside of the hind-wing is coarser, with more brick-red and more white in it.

HESPERIIDÆ.

Eudamus proteus, Linn. 9 specimens. Constant Spring, below Gordon Town, Port Antonio (common). Has a quiet flapping flight; at rest all its wings are nearly upright, but the fore-wings much sloped back, the *tails* at

right angles to the plane of the hind-wings. Frequent Bougainvillæa flowers.

Eudamas catillus, Cram. Two specimens, taken late in the afternoon in a wood at Montego Bay; flight not very swift.

Thymele grenadensis, Schaus. A very worn specimen, on the bank of the Rio Cobre, Spanish Town. It settled repeatedly on the same spot.

Telegonus hurga, Schaus. A worn specimen, in the Mahogany Wood, Rockalva, Ramble. It was very bold, returning again and again to rest on the same fallen tree.

Perichares corydon, Fabr. Two. Mackfield, Montego Bay.

Prenes nyctelius, Latr. Three. Mandeville, Port Antonio ("Shotover," East Harbour).

Prenes ares, Feld. One. "Shotover," Port Antonio.

Anastrus simplicior, Möschl. One. Cold Harbour, Port Antonio. Rests with the wings fully expanded.

Acolastes amyntas, Linn. One, taken by Mrs. Longstaff in the Botanic Garden, Castleton.

Serdis aurinia, Plötz. One of each sex, taken at the foot of Park Mount, Port Antonio, about 2.30 p.m. A very distinct insect identified by Mr. H. H. Druce with Plötz' excellent figure of the male from a Jamaican specimen. The insect does not seem to be known in British collections. Mr. Godman ("Ann. Mag. Nat. Hist.," Aug. 1907) says of the figure that it probably belongs to *Limochares* or *Serdis*. Mabille places it in his genus *Serdis* under the heading "Species non visæ" (*Genera Insectorum*, Hesperidæ, p. 144).*

Ephyriades otreus, Cram. One specimen, near Chancery Hall, Constant Spring; settled on a projecting grass stem with wings fully expanded.

Hesperia syrighthus, Fabr. Twelve. Generally distributed over the Island, especially common at Mandeville and Port Antonio. A somewhat variable species within limits. It rests with the wings fully expanded.

Hylephila phylæus, Drury. Five. This brilliant little

* On April 5, 1908, Mr. H. H. Druce wrote saying that among some oddments in the British Museum he had come across the type of Butler's *Pamphila insolata*. (See Proc. Zool. Soc. Lond., 1878, p. 483). The specimen is from Jamaica (labelled *insolita*), and appears to be identical with my insects. Butler's name has priority since Plötz published his description in 1883.

golden Skipper was common near the shore, Port Antonio.

Catia drurii, Latr. Two. Below Gordon Town, c. 800 feet, and on the Park Mount Road, Port Antonio, c. 600 feet. Very hard to see. It rests with all the wings up, the fore-wings much sloped back.

Catia vesuria, Plötz. One, taken by my Portuguese servant in the garden at Walderston.

Morys valerius, Möschl. Four. Two above Constant Spring, c. 700 feet; two on "Shotover," Port Antonio.

Thymelicus vibex, Hübn. (The yellowest form is *combinata*, Plötz., H. H. Druce.) A female came to light at Montego Bay.

Cymæncs silius, Latr. One, in the wood above the Jam Factory, Constant Spring.

I call attention to the number of species in which Jamaican examples differ from Venezuelan in the replacement of black or grey by fulvous, or orange brown. It is true that the soil of Jamaica, even where the formation is white coralline limestone, is often of an orange brown colour, but it scarcely seems possible to connect the two as cause and effect.